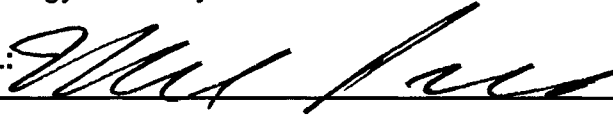


REPORT

DATE: June 4, 2004
TO: Energy & Environment Committee
FROM: Nancy Pfeffer, Sr. Planner, 213-236-1869, e-mail: pfeffer@scag.ca.gov
SUBJECT: Resolution on Building Energy Efficiency

EXECUTIVE DIRECTOR'S APPROVAL:



RECOMMENDED ACTION:

Approve Resolution #04-453-1: To Encourage Adoption of Local Building Energy Efficiency Ordinances, and forward to the Regional Council for adoption.

SUMMARY:

The resolution encourages SCAG jurisdictions to adopt an ordinance (based on a model) requiring new buildings to exceed state building energy standards by 10-15%, depending on the building type.

BACKGROUND:

The dramatic population growth forecasted for the SCAG region in the coming decades will involve the construction of numerous new buildings – residential, commercial, and governmental. Buildings are one of the largest consumers of energy, using one-third of total energy and nearly two-thirds of electricity. Generally, buildings use electrical power for lighting and air-conditioning and natural gas for water and space heating. Various appliances within buildings use both types of energy.

In order to alleviate the significant increase in energy consumption that will come with growth in the SCAG region, it is important to minimize the amount of energy used by buildings. Since the mid-1970's, the state of California has had building energy efficiency standards, referred to as Title 24 standards. In addition, there are several public and private programs designed to reduce building energy use even further. A notable public program is Energy Star, which sets standards for new home construction and for appliance energy use. An increasingly popular private program is the non-profit U.S. Green Building Council's Leadership in Environmental and Energy Design (LEED) program. This program offers varying levels of certification depending on the building design features, and covers energy use as well as use of water and building materials.

While building "green" can increase the initial cost of construction, recent studies have shown that the cost premium may average only about three percent, not 10-15% as had previously been thought. Moreover, investments in energy efficiency have been demonstrated to pay for themselves in operational savings. According to a study done for

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the California Sustainable Building Task Force, spending an extra \$100,000 on “green” building features would save at least \$1 million over the life of a \$5-million building. One large developer reports that efficiencies from its own Energy Star buildings are saving it \$13 million annually in operating costs.

A new state office building in Sacramento, housing the Department of Health Services, is estimated to be saving \$185,000 in annual energy costs through a design that is 40% more efficient than code. And the Inland Empire Utilities Agency reports that its two new headquarters buildings were built to LEED Platinum standards – the highest certification level – at a substantial savings over conventional building construction. The agency estimates that it continues to reap \$800,000 annually in electricity cost savings through measures that are 60% more stringent than the state code.

The City of Santa Monica in 2000 adopted a local ordinance requiring new construction, and renovations exceeding 50% of the cost of a new building, to exceed the Title 24 standards by 20-25%, depending on the building type.* The ordinance does not apply to one- and two-family residential structures or qualified historical buildings. The resolution provided will encourage local jurisdictions to adopt a similar ordinance, so that the region can experience the savings and environmental benefits associated with building energy efficiency measures as the population grows.

The following materials will be provided in a separate mailing:

- White paper: Supporting Greater Building Energy Efficiency in the SCAG Region
- Model ordinance (included in white paper)
- Resolution.

FISCAL IMPACT:

Staff time in support of this analysis is covered by Work Element 04-290 in the current Overall Work Program. This work is funded by a grant from the U.S. Department of Energy’s Rebuild America program via the California Energy Commission. Adopting the regional resolution will have no fiscal impact on SCAG.

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Pfeffer

* The target percentages were reduced to 10-15% when the state building standards were tightened following the state’s 2000-2001 energy crisis.